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10/728,549

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James Hammer

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11/14/2006

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EXAMINER

GRAYSAY, TAMARA L

ART UNIT

PAPER NUMBER

3636

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/728,549

Applicant(s)

HAMMER, JAMES

Examiner

Tamara L. Graysay

Art Unit

3636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

The indicated allowability of claim 8 is withdrawn in view of the reference to WestblockSystems (12 Mar 2004 PTO-1449). Rejections based on the newly cited reference(s) follow.

#### *Drawings*

1. The drawings are objected to because of the following:

FIG. 2 fails to comply with 37 CFR 1.84(p)(1) because an inverted comma is associated with reference character 50. Appropriate correction to the specification is required.

FIG. 5: the reference character 60 that lacks a lead line and located at the right half of the figure should be deleted.

FIG. 6 fails to comply with 37 CFR 1.84(p)(1) because an inverted comma is associated with reference characters 16 and 18. Appropriate correction to the specification is required.

FIG. 6: reference character 65 should be 64 because the lead line is directed to the rear of the unitary block.

The drawings fail to comply with 37 CFR 1.84(p)(5) because reference character 76, mentioned in the paragraph beginning at page 17, line 7, does not appear in the drawings.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

2. The abstract of the disclosure is objected to because of the following:

Language that may be implied, such as “The present disclosure concerns” should be avoided.

Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities:

The ¶ beginning at page 5 line 14: [[upper]] (second occurrence) should be lower as depicted in FIG. 10.

The second sentence of the ¶ beginning at page 6, line 9: [[backfill courses]] should be backfill courses constructed from to correct a grammatical error.

The ¶ beginning at page 7, line 11: [[110]] should be 112.

The ¶ beginning at page 8, line 9: [[210]] should be 206.

The third sentence of the ¶ beginning at page 9, line 17: [[a assembly]] should be an assembly.

The second sentence of the ¶ beginning at page 11, line 18: the sloped end surface 24 in FIG. 2 is depicted as facing generally upward and forwardly or downward and rearwardly but not [[upward and rearwardly]].

The ¶ beginning at page 12, line 18: [[50]] should be 20.

The last sentence of the ¶ beginning at page 15, line 1: [[16]] should be 18.

The ¶ beginning at page 19, line 7: [[106]] should be 108.

Appropriate correction is required.

***Claim Objections***

4. Claims 3, 4, 15, 16, 20, 28 and 33 are objected to because of the following informalities:

Claim 3, line 1: courses should be inserted after “more” for consistency.

Claim 4, line 5: ~~[[extending]]~~ should be changed to adapted to extend in order to avoid positive recitation of the fill material because the claim is directed to the retaining wall alone as mentioned in the preamble.

Claim 4, line 1: in combination with a tie-back sheet should be inserted after the comma because the wall cannot comprise the tie-back sheet when the tie-back sheet is claimed as adapted to extend[ing] rearwardly into fill material “behind” the wall. The claim has been treated as a combination of the wall and the tie-back sheet. This interpretation is consistent with other claim(s) that require the unitary block depth to be equal to the wall depth.

Claim 15, line 1: ~~[[containing]]~~ should be changed to adapted to contain in order to avoid positive recitation of the fill material because the claim is directed to the retaining wall alone as mentioned in the preamble.

Claim 16, line 1: ~~[[containing]]~~ should be changed to adapted to contain in order to avoid positive recitation of the fill material because the claim is directed to the retaining wall alone as mentioned in the preamble.

Claim 20, line 3: ~~[[extending]]~~ should be changed to adapted to extend in order to avoid positive recitation of the fill material because the claim is directed to the retaining wall alone as mentioned in the preamble.

Claim 20, line 1: in combination with at least one wall-reinforcing sheet should be inserted after the comma because the wall cannot comprise the wall-reinforcing sheet when the wall-reinforcing sheet is claimed as adapted to extend[ing] rearwardly into fill material “behind” the retaining wall. The claim has been treated as a combination of the wall and the at least one wall-reinforcing sheet.

Claim 28, line 1: adapted to be should be inserted before “filled” in order to avoid positive recitation of the fill material because the claim is directed to the retaining wall alone as mentioned in the preamble.

Claim 33, line 2: ~~[[extending]]~~ should be changed to adapted to extend in order to avoid positive recitation of the fill material because the claim is directed to the method of constructing the retaining wall alone as mentioned in the preamble.

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Claim 33, line 1: in combination with a tie-back sheet should be inserted after the comma and [[a]] should be the because the wall cannot comprise the wall-reinforcing sheet when the wall-reinforcing sheet is claimed as adapted to extend[ing] rearwardly into fill material “behind” the retaining wall. The claim has been treated as a combination of the wall and the tie-back sheet.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-35 are rejected under 35 U.S.C. 102(b) as being anticipated by the

WestblockSystems information (WS), including:

- 2-WS: WestblockSystems, “GravityStone, So Simple, It’s Advanced,” Contractor’s Manual, pages 15-17 (cited by applicant, listed second under Other Documents on the IDS filed 12 March 2004)
- 3-WS: WestblockSystems, “GravityStone, So Simple, It’s Advanced,” product brochure, 4 pages (cited by applicant, listed third under Other Documents on the IDS filed 12 March 2004)
- 4-WS: WestblockSystems, “GravityStone, So Simple, It’s Advanced,” product brochure, 2 pages (cited by applicant, listed fourth under Other Documents on the IDS filed 12 March 2004)

Claim 1: Claim 1 has been interpreted as being limited such that the unitary blocks and block assemblies cannot be on the same course due to the courses being first and second and the recitation “above or below” at the penultimate line of the claim. Further, claim 1 does not limit the depth of the unitary block to the depth of the wall, only that the depth

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extends in a direction from the front to the back of the wall. The WS disclosure comprises a retaining wall inherently having a front and back, the wall comprising:

a first set of courses (at 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts a four foot layer of M.S.E. Fat Face/Mini-Cells; at 4-WS at page 1/2: a Fat Face is depicted as a unitary block) comprising a plurality of unitary blocks placed side by side and extending in a depth direction and not connected to other blocks in the depth direction; and

a second set of courses (at 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts an eight foot layer of Modulares; at 4-WS at page 2/2: a modular is depicted as a mini cell, single cell, or multi cell block assembly comprising at least two interconnected block components, i.e., face, trunk, anchor components);

wherein the first set of courses is above or below the second set of courses (at 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts the first set of M.S.E. courses above the second set of modular courses).

Further, at 2-WS at page 16, the third paragraph of section 2.3.4 mentions that the systems (M.S.E. and modular) are combined on the same wall for the most cost-effective wall system.

Claim 2: As mentioned with regard to claim 1, at 3-WS at the bottom of page 2/4: the first set of M.S.E. Fat Face unitary courses is located above the second set of Modular block assembly courses.

Claim 3: At 3-WS at the bottom of page 2/4: the first set of M.S.E. Fat Face unitary courses is located below the set of Single Cell block assembly courses above the twelve foot line.

Claim 4: As noted at 3-WS at the bottom of page 2/4: the wall is used in combination with a GeoGrid or tie-back sheet and the second and third bullets on the same page mention geosynthetic reinforcement that inherently is located behind the wall where the fill material to be reinforced is located.

Claim 5: At 4-WS at page 2/2: the diagrams at the top of the page depict the block assembly comprising a face block, anchor block, and trunk block connected to the face block and anchor block.

Claim 6: At 4-WS at pages 1/2 and 2/2: the diagrams depict dovetail connectors on the face block, trunk block, and anchor block.

Claim 7: At 4-WS at the top right corner of page 2/2: the diagram depicts a block assembly (multi cell) that includes, from right to left, a face block, a first trunk block rearwardly from the face block; a first anchor block connected to the first trunk block opposite the face block; a second trunk block extending rearwardly from the first anchor block; and a second anchor block connected to the second trunk block opposite the first anchor block.

Claim 8: The WS disclosure comprises a retaining wall inherently having a front and back, the wall comprising:

- a first set of courses (at 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts a four foot layer of M.S.E. Fat Face/Mini-Cells; at 4-WS at page 1/2: a Fat Face is depicted as a unitary block); and

- a second set of courses (at 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts an eight foot layer of Modulares; at 4-WS at page 2/2: a modular is depicted as a mini cell, single cell, or multi cell block assembly comprising at least two interconnected block components, i.e., face, trunk, anchor components);

wherein the first set of courses is above or below the second set of courses (at 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts the first set of M.S.E. courses above the second set of modular courses).

At 4-WS at the right column of page 1/2: the top figure depicts a unitary block (Fat Face block) that comprises a front portion, two wall portions, a rear portion, and a core defined by the front portion, wall portions, and rear portions.



Claim 9: At 3-WS at the Components section on page 3/4: the Fat Face and Standard Face diagrams depict block-connecting elements that connect adjacent courses of block.

Claim 10: At 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts a four foot layer of M.S.E. Fat Face/Mini-Cells, which inherently includes at least an upper and lower course of unitary blocks that are approximately eight inches high as shown on page 3/4. At 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts an eight foot layer of Modulares, which includes at least an upper and lower course of block assemblies that are approximately eight inches high as shown on page 3/4.

Claims 11-13: At 3-WS at page 3/4: the schematic diagram of the Wall Assembly depicts the offset arrangement of adjacent courses.

Claim 14: At 3-WS at page 3/4: the diagrams of the components show the depth of each particular course being the depth of the wall. As mentioned on page 2/4, the Fat Face and Mini-Cell are interchangeable in the M.S.E. zone of the wall, thus the wall depth is the depth of the unitary block (the face block).

Claim 15: At 4-WS at the top of page 2/2: the diagrams depicting the block assemblies and at 3-WS at page 3/4: the wall assembly diagram depicts the chambers defined between trunk block and/or anchor block horizontally adjacent block assemblies.

Claim 16: At 4-WS at the Components Fat Face diagram at page 3/4: the unitary block (fat face) inherently includes chambers between the wall portions of horizontally adjacent unitary block.

Claim 17: The WS disclosure comprises a retaining wall inherently having a front and back, the wall comprising:

a plurality of courses (at 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts a four foot layer of M.S.E. Fat Face/Mini-Cells; at 4-WS at page 1/2: a Fat Face is depicted as a unitary block) at least a portion comprising unitary blocks placed side by side and having a front surface at the front of the wall and a back surface at the back of the wall (note for example at 3-WS the Wall Assembly diagram at page 3/4 that depicts each mini-cell extending from the front of the wall to the back of the wall and that the mini-cell and fat face are substitutable for each other as mentioned at 3-WS the Fill Site diagram at page 2/4); and

a plurality of courses (at 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts an eight foot layer of Modulars), at least a portion comprising block assemblies placed side by side (note for example at 3-WS the Wall Assembly diagram at page 3/4) and each block assembly comprising at least a first block and a second block extending rearwardly therefrom (at 4-WS at page 2/2: a modular is depicted as a mini cell, single cell, or multi cell block assembly comprising at least two interconnected block components, i.e., face, trunk, anchor components); wherein courses having unitary blocks are located above or below courses having block assemblies (at 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts the Fat Face unitary courses above the lower Modular courses).

Further, at 2-WS at page 16, the third paragraph of section 2.3.4 mentions that the systems (M.S.E. and modular) are combined on the same wall for the most cost-effective wall system.

Claim 18: As mentioned with regard to claim 1, at 3-WS at the bottom of page 2/4: the first set of M.S.E. Fat Face unitary courses is located above the second set of Modular block assembly courses.

Claim 19: At 3-WS at the bottom of page 2/4: the first set of M.S.E. Fat Face unitary courses is located below the set of Single Cell block assembly courses above the twelve foot line.

Claim 20: As noted at 3-WS at the bottom of page 2/4: the wall is used in combination with a GeoGrid or wall-reinforcing sheet and the second and third bullets on the same page mention geosynthetic reinforcement that inherently is located behind the wall where the fill material to be reinforced is located.

Claim 21: At 3-WS at page 3/4: the diagrams of the components show the depth of each particular course being the depth of the wall. As mentioned on page 2/4, the Fat Face and Mini-Cell are interchangeable in the M.S.E. zone of the wall, thus the wall depth is the depth of the unitary block (the fat face block).

Claim 22: At 4-WS at page 2/2: the diagrams at the top of the page depict the block assembly comprising a generally I-shaped assembly having front or face block, rear or anchor block, and trunk block connected to the front block and rear block.

Claim 23: At 4-WS at page 2/2: the wall is shown where each course is set back to form a sloped wall face.

Claims 24 and 25: At 4-WS at the bottom of page 1/4: the GravityStone Specifications mention that the fat face or unitary block has the same width and height of approximately eighteen inches by eight inches, respectively, as the thin face or front block of the block assembly.

Claim 26: Claim 26 has been interpreted as being limited such that the single blocks and block assemblies cannot be on the same course due to the courses being different and the recitation "above or below" at the penultimate line of the claim. The WS disclosure comprises a retaining wall inherently having a front surface and back surface, the wall comprising:

a plurality of courses (at 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts a four foot layer of M.S.E. Fat Face/Mini-Cells; at 4-WS at page 1/2: a Fat Face is depicted as a unitary block) a portion of each comprising single blocks

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placed side by side and having a front surface at the front surface of the wall and a back surface at the back surface of the wall (note for example at 3-WS the Wall Assembly diagram at page 3/4 that depicts each mini-cell extending from the front of the wall to the back of the wall and that the mini-cell and fat face are substitutable for each other as mentioned at 3-WS the Fill Site diagram at page 2/4);

at least one tie-back sheet between single blocks in adjacent courses (as noted at 3-WS at the bottom of page 2/4: the wall is used in combination with a GeoGrid or tie-back sheet and the second and third bullets on the same page mention geosynthetic reinforcement and at 2-WS at the M.S.E. diagram at top of page 16, the tie-back sheet is between adjacent courses – a common practice in retaining wall construction);

a plurality of different courses (at 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts an eight foot layer of Modulares), a portion of each comprising block assemblies placed side by side (note for example at 3-WS the Wall Assembly diagram at page 3/4) and each block assembly comprising a front or face block, at least one elongated trunk block extending rearwardly therefrom, and at least one anchor block connected to the trunk block and opposite the front block (at 4-WS at page 2/2: a modular is depicted as a mini cell, single cell, or multi cell block assembly comprising at least two interconnected block components, i.e., face, trunk, anchor components),

wherein courses having single blocks are located above or below courses having block assemblies (at 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts the Fat Face single courses above the lower Modular courses).

Further, at 2-WS at page 16, the third paragraph of section 2.3.4 mentions that the systems (M.S.E. and modular) are combined on the same wall for the most cost-effective wall system.

Claim 27: At 4-WS at pages 1/2 and 2/2: the diagrams depict dovetail connectors on the face block, trunk block, and anchor block.

Claim 28: At 4-WS at the top of page 2/2: the diagrams depicting the block assemblies and at 3-WS at page 3/4: the wall assembly diagram depicts the chambers defined between trunk block and/or anchor block horizontally adjacent block assemblies.

Claims 29 and 30: As depicted in the diagrams, the method of constructing a retaining wall inherently includes the recited steps of forming one course of single blocks having a depth spanning the depth of the wall and forming a different course of block assemblies having at least two interlocking block components. A wall is inherently built from bottom to top. Looking to 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts the Fat Face single courses above the lower Modular courses so the limitations of claims 29 and 30 are met by forming M.S.E. Fat Face or single block course on top of or after forming the Modular or block assembly course.

Claim 31: Looking to 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts the Fat Face single courses below the M.S.E. Single-Cell block assembly courses so the limitations of claim 31 is met by forming M.S.E. Fat Face or single block course below or before forming the M.S.E. Single-Cell block assembly course.

Claim 32: The single block course forming step includes forming a plurality of courses because each course is approximately eight inches high and the M.S.E. Fat Face or single block portion of the wall is four feet high, i.e., approximately six courses.

Claim 33: As noted at 3-WS at the bottom of page 2/4: the wall is used in combination with a GeoGrid or tie-back sheet and the second and third bullets on the same page mention geosynthetic reinforcement that inherently is located behind the wall where the fill material to be reinforced is located.

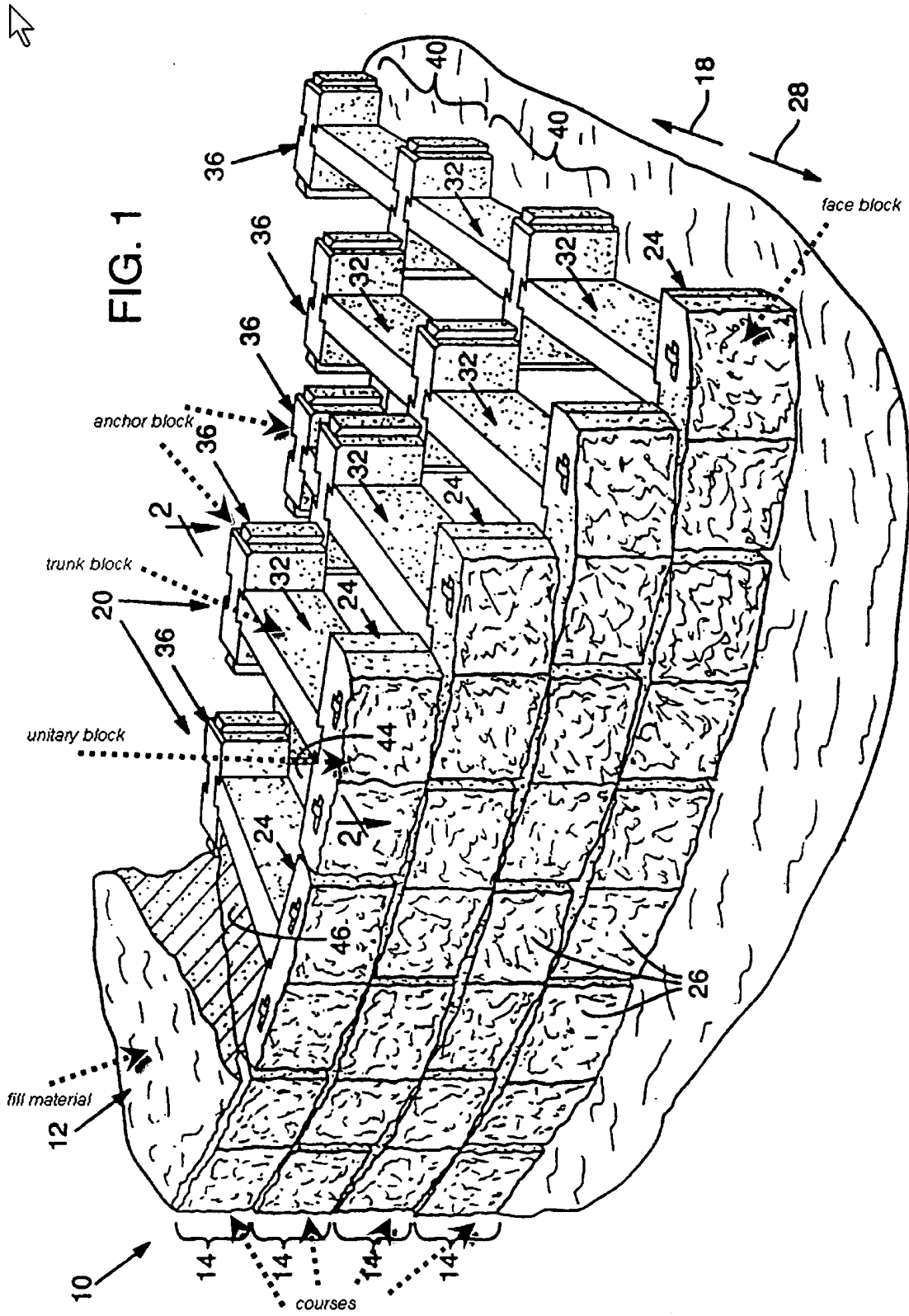
Claims 34 and 35: At 4-WS page 2/2: the wall forming step is comprised of assembling a plurality of block components and forming a course from a plurality of block assemblies.

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6. Claims 1-3, 5-7, 9-19, 21-25, 29-32, 34 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Hammer (US-5350256).

Claim 1: Claim 1 has been interpreted as being limited such that the unitary blocks and block assemblies cannot be on the same course due to the courses being first and second and the recitation “above or below” at the penultimate line of the claim. Further, claim 1 does not limit the depth of the unitary block to the depth of the wall, only that the depth extends in a direction from the front to the back of the wall.

Claims 1-3: Hammer discloses a retaining wall (FIG. 1) comprising a first set of one or more courses (14), at least a portion of each comprising a plurality of unitary blocks placed side by side with respect to each other (24); and a second set of one or more courses, at least a portion of each comprising a plurality of block assemblies placed side by side (224, 32, 36), each block assembly comprising at least two interconnected block components; where the first set of one or more is located above or below the second set of one or more courses because all of the courses overlay one another. Also, reference is made to column 5, lines 51-54 which mentions that the face blocks can be used alone, i.e., not connected to other blocks in the direction of the block depth.



Claims 5 and 6: Hammer discloses each block assembly comprises a face block having a front surface exposed in the front surface of the wall (24); at least one anchor block (36); and at least one elongated trunk block extending between the face block and the anchor block, the trunk block having a first end portion connected to the face block and a second end portion connected to the anchor block (32). The face block of each assembly has a dovetail connector element that interconnects with a complementary dovetail connector element of the first end portion of a respective trunk block, and the anchor block of each element that interconnects with a complementary dovetail connector element of the second end portion of a respective trunk block (column 4, lines 4-20).

Claim 7: Hammer discloses (at the right end of FIG. 1) each block assembly comprises a first anchor block connected to the first trunk block opposite the face block; a second trunk block connected to and extending rearwardly from the first anchor block; and a second anchor block connected to the second trunk block opposite the first anchor block (40).

Claim 9: Hammer discloses the unitary blocks coupled to the block assemblies of a vertical adjacent course with block-connecting elements (column 4, lines 33-37).

Claims 10-14: The first set of courses comprises an upper and lower course of unitary blocks; and the second set of courses comprises an upper and lower course of block assemblies. This is mentioned at column 5, lines 51-54, e.g., the face blocks can be used alone, without other interconnected blocks. Thus Hammer teaches modifying the courses to include courses having only a face or unitary block. Moreover, the courses are positioned such that a block on an upper course is adjacent two blocks on a lower course.

Claim 15: Hammer discloses chambers between adjacent block assemblies that are adapted to contain fill material (FIG. 1).



Claim 16: Hammer discloses unitary blocks (24) having an angled sidewall. It is inherent that the angled sidewalls form a channel between the horizontally adjacent unitary blocks that may contain fill material when the wall is backfilled.

Claims 17-19, 21 and 22: Hammer discloses a retaining wall comprising a plurality of courses, at least a portion of each comprising a plurality of unitary blocks placed side by side (column 5, lines 51-54 mention that the face blocks can be used alone); and a plurality of course, at least a portion of each comprising a plurality of block assemblies placed side by side in respective courses, the block assemblies comprise at least a first block (24) and a second block (32); the courses in a wall are inherently located above and below each other. The depth of the unitary block in the embodiment mentioned at column 5, lines 51-54, would be the depth of the wall insofar as the face block is used alone or attached to some other element, not the trunk or anchor blocks.

Claims 23-25: Hammer depicts each course stepped to from a sloped wall face (column 3, lines 47-49) and each unitary block width and height are equal to the width and height of the block assemblies.

Claims 29-32: Although Hammer does not explicitly mention a method of constructing a retaining wall, it is inherent in the disclosure that the wall is constructed by forming one course on top of another course. Further, single block courses are mentioned at column 5, lines 51-54.

Claim 34: The block assembly course forming step includes forming a plurality of courses as depicted in FIG. 1.

Claim 35: The block assembly course forming step inherently includes assembling the interlocking block assembly components in order to form the wall.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4, 20 and 26-28 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hammer (US-5350256) in view of the Admission of prior art by applicant on page 1, lines 19-22 of the specification.

Claims 4 and 20: Hammer lacks a tie-back sheet between adjacent retaining wall courses.

The Admission teaches that it is well known in the retaining wall art use a reinforcing horizontal tie-back sheet located between adjacent layers of blocks and adapted to extend rearwardly into an excavated area to be backfilled for retaining the wall (page 1, lines 19-22 of the present application). Such an arrangement ties the retaining wall to and reinforces the fill material.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hammer to include a tie-back sheet between adjacent courses in order to tie the retaining wall to and reinforce the fill material.

Claim 26: Hammer discloses a retaining wall comprising a plurality of courses of single blocks arranged side by side and as mentioned at column 5, lines 51-54 the single blocks (24) used without the trunk and anchor blocks inherently having a front surface in the front surface of the wall and a back surface in the back surface of the wall; a plurality of different courses comprising a plurality of block assemblies (24, 32, 36) arrange side by side, each block assembly comprising a front block (24), at least one an anchor block (36)

and at least one trunk block (32). In the wall, the courses are located above or below one another.

Hammer lacks a tie-back sheet between single blocks in adjacent courses.

The Admission teaches that it is well known in the retaining wall art use a reinforcing horizontal tie-back sheet located between adjacent layers of blocks and adapted to extend rearwardly into an excavated area to be backfilled for retaining the wall (page 1, lines 19-22 of the present application). Such an arrangement ties the retaining wall to and reinforces the fill material.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hammer to include a tie-back sheet between adjacent courses in order to tie the retaining wall to and reinforce the fill material.

Claim 27: Hammer discloses each block assembly comprises a face block having a front surface exposed in the front surface of the wall (24); at least one anchor block (36); and at least one elongated trunk block extending between the face block and the anchor block, the trunk block having a first end portion connected to the face block and a second end portion connected to the anchor block (32). The face block of each assembly has a dovetail connector element that interconnects with a complementary dovetail connector element of the first end portion of a respective trunk block, and the anchor block of each element that interconnects with a complementary dovetail connector element of the second end portion of a respective trunk block (column 4, lines 4-20).

Claim 28: Hammer discloses chambers between adjacent block assemblies that are adapted to contain fill material (FIG. 1).

Claim 33: Hammer lacks a tie-back sheet between adjacent retaining wall courses.

The Admission teaches that it is well known in the retaining wall art use a reinforcing horizontal tie-back sheet located between adjacent layers of blocks and adapted to extend rearwardly into an excavated area to be backfilled for retaining the wall

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(page 1, lines 19-22 of the present application). Such an arrangement ties the retaining wall to and reinforces the fill material.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hammer to include a tie-back sheet between adjacent courses in order to tie the retaining wall to and reinforce the fill material.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hammer (US-5350256) in view of 3-WS: WestblockSystems, "GravityStone, So Simple, It's Advanced," product brochure, 4 pages (cited by applicant, listed third under Other Documents on the IDS filed 12 March 2004).

Claim 8: Hammer lacks the use of a unitary block having a front portion, two side wall portions, and a rear portion connected to the wall portions opposite the front portion, and defining a core.

At 3-WS at the bottom of page 2/4: the diagram of a Fill Site depicts a four foot layer of M.S.E. Fat Face/Mini-Cells. This teaching is such that a unitary block and mini-cell block are substitutable for each other in the M.S.E. portion of a retaining wall. Inherently the unitary block reduces the amount of labor required because the unitary block does not require assembly at the site during construction of the retaining wall.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hammer to substitute a unitary block for the upper mini-cell block depicted in FIG. 1 of Hammer, such as taught by 3-WS, in order to reduce the amount of labor required because the unitary block does not require assembly at the site during construction of the retaining wall.

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***Conclusion***

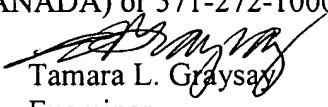
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Anderson (US-6079908) teaches a retaining wall, in particular FIGS. 77-79, having a unitary block (621) which is the depth of the wall or is used in combination with other blocks to form a block assembly, such as front block 621, trunk block 659, and anchor block 659. In FIG. 78, a chamber 914 is depicted between horizontally adjacent blocks.
- Khamis (US-6050749) teaches a composite retaining wall having courses of different block.
- Anderson (US-5474405) teaches a composite retaining wall having courses with only unitary block and courses with block assemblies including facing block interconnected to anchor/trunk blocks.
- Suematsu (JP-2000-129700) teaches a unitary block (1) used in a retaining wall.
- Itoi (JP-2000-336677) teaches a unitary block (main block 1) that may be used in combination with a second block (stay block 2).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara L. Graysay whose telephone number is 571-272-6728. The examiner can normally be reached on Mon - Fri from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Cuomo, can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Tamara L. Graysay

Examiner  
Art Unit 3636

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